Remarks

Reconsideration of this application as amended is respectfully requested.

Claims 1-4, 7-8, 12-15, 20-22, 24-26, and 30-31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,603,020 of *Hashimoto el al.* ("*Hashimoto*").

Claims 5-6, 23, and 35 stand rejected under 35 U.S.C. 103(a) as being unpatentable over *Hashimoto* and U.S. Patent No. 5,761,507 of *Govett* ("*Govett*").

Claims 9 and 27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Hashimoto* and U.S. Patent No. 5,790,853 of *Nomura el al.* ("*Nomura*").

Claims 10-11, 16-19, 28-29, and 32-34 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Hashimoto* and U.S. Patent No. 5,623,600 of *Ji el al.* ("*Ji*").

Applicant respectfully submits that claim 1 is not obvious in view of *Hashimoto* because *Hashimoto* does not disclose or suggest binding a local name used by a task to available resources as claimed in claim 1. Rather than teach or suggest tasks that refer to resources using local names as claimed in claim 1, *Hashimoto* teaches a software system in which tasks (applications) refer to resources (files) using global names that are fixed according to a hierarchical naming structure (*Hashimoto*, col. 2, lines 8-14). For example, *Hashimoto* states that

> When requested by the application program 8, (FIG. 3) to open a file, the operating system searches the file system 3 for the program-specified file...

(*Hashimoto*, col. 2, lines 18-20) and that

> the application program specifies the complete path name /a/b/d/e/x to request the operating system to open the file x.

(*Hashimoto*, col. 2, lines 12-14) and that

> file names are stored in directories. For example,

> the name of a file, x, is stored in the directory e...

(*Hashimoto*, col. 1, lines 25-26). Applicant submits that all tasks in *Hashimoto* would have to use the file system path name /a/b/d/e/x to refer to file x given the hierarchical structure of directories a/b/d/e and given the fact that the name for the file x is stored in the file system directory e rather than in a local name space for a task as claimed in claim 1. In contrast, the limitations of claim 1 enable a task to refer to a resource using a local name.

The Examiner has stated that

> As to claim 1, Hashimoto discloses ... a local name (1 of task management table 6, Fig. 8) used by the task (task 8, Fig. 8) to resources...

(Page 3, Office Action mailed 9/12/03). Applicant submits that element 1 of task management table 6 in Fig. 8 of *Hashimoto* is not a local name as stated by the Examiner. Applicant submits that element 1 of task management table 6 is a reference to an entry in a file descriptor management table 7 that stores a pointer to a task-to-file correspondence management table 5. (*Hashimoto*, col. 2, lines 34-38).

In addition, Applicant submits that claim 1 is not obvious in view of *Hashimoto* because *Hashimoto* does not disclose or suggest binding a local name used by a task to one or more of a set of available resources as claimed in claim 1. Given that tasks in *Hashimoto* refer to a file using a hierarchical path name (*Hashimoto*, col. 2, lines 12-14) and given that a file name in *Hashimoto* is specified in the directory in the hierarchy that immediately precedes the file (*Hashimoto*, col. 1, lines 25-28), Applicant submits that the hierarchically structured file system of *Hashimoto* would not permit a task to use the same name to refer to multiple files.

Applicant also submits that claim 1 is not obvious in view of *Hashimoto* because *Hashimoto* does not disclose or suggest binding a local name to available resources using a description of a desired resource as claimed in claim 1. Instead, the operating system of *Hashimoto* binds a name to a file using a device number and an i node number for the file. (*Hashimoto*, col. 2, lines 24-29). The device number and i node number of a file disclosed by *Hashimoto* is not a description of a desired resource as claimed in claim 1 but instead specifies a physical location of a file on a physical storage media. (*Hashimoto*, col. 1, line 40 through col. 2, line 7).

The Examiner has stated that

> As to claim 1, Hashimoto discloses...a flexible binding...using a description (a file descriptor, line 65 column 10) of a desired resource (the file, line 65 column 10).

(Page 3, Office Action mailed 9/12/03). Applicant submits that the file descriptor disclosed by *Hashimoto* is a pointer to control tables rather than a description of a desired resource as stated by the Examiner. For example, *Hashimoto* states that

> When requested by the application program 8, (FIG. 3) to open a file, the operating system searches the file system 3 for the program-specified file, then makes that file ready for access to and returns a file descriptor for the specified file to the application program 8.

(*Hashimoto*, col. 2, lines 18-22) and that

> an entry is added to a file descriptor management table 7...the added entry, e.g., and entry number, is presented to the open-requesting application program...8 as a file descriptor...

(*Hashimoto*, col. 2, lines 34-41). Applicant submits that a file descriptor that is an entry number in a table 7 is not a description of a desired resource as claimed in claim 1.

Applicant also submits that the control tables

referenced by the file descriptor of *Hashimoto* store device numbers and i node numbers that specify the location of file data on a physical storage media rather than a description of a desired resource as claimed in claim 1. For example, *Hashimoto* states that

> a search is made of the file system for a file with the specified name. In practice, the device number and the i node number of the file are obtained. In subsequent step S11, a file management table 4...for that file thus obtained is created to store the device number and the i node number of the specified file.

(*Hashimoto*, col. 2, lines 24-29) and that

> a pointer to the file management table 4...is stored in a task-to-file correspondence management table 5...

(*Hashimoto*, col. 2, lines 31-33) and that

> a pointer to the task-to-file correspondence management table 5...is stored in the table 7.

(*Hashimoto*, col. 2, lines 35-36). Thus, the file descriptor of *Hashimoto* points to the table 7 which points to the table 5 which points to the table 4 which contains a device number and an i node number that identifies the location of file data on a physical storage media. It is submitted that a file descriptor that points ultimately to device and i node numbers is not a description of a desired resource as claimed in claim 1.

Applicant further submits that claim 1 is not obvious in view of *Hashimoto* because *Hashimoto* does not disclose resource mediator that obtains a message from a task which contains a local name and that identifies a resource handler task for handling the message by resolving the local name as claimed in claim 1.

The Examiner has stated that

> Hashimoto does not explicitly disclose a resource mediator. However, Hashimoto teaches a table (task management table 6, Fig. 8) obtains a message (arrows form application program 8 to task management table 6...

(Page 3, Office Action mailed 9/12/03). Applicant submits

that the task management table 6 of *Hashimoto* is not a resource mediator that obtains a message as claimed in claim 1. Instead, the task management table 6 of *Hashimoto* is a table contained within an operating system. (See Figures 3, 6, and 8 of Hashimoto).

It is therefore respectfully submitted that the software system of claim 1 is not obvious in view of *Hashimoto* because *Hashimoto* does not disclose the limitations in claim 1 that enable a task to access resource handlers for available resources in the software system using a local name that is bound to a description of a desired resource.

Given that claims 2-21 depend from claim 1, it is submitted that claims 2-21 are not obvious in view of *Hashimoto*.

Applicant further submits that claim 22 is not obvious in view of *Hashimoto*. Claim 22 includes limitations similar to the limitations of claim 1. Therefore the remarks stated above with respect to claim 1 also apply to claim 22.

Given that claims 23-35 depend from claim 22, it is submitted that claim 22 is not obvious in view of *Hashimoto*.

Applicant submits that claims 5-6, 23, and 35 are not obvious in view of *Hashimoto* and *Govett* because claims 5-6, 23, and 35 depend from claims 1 and 22 and *Hashimoto* and *Govett* do not teach or suggest the limitations of claims 1 and 22. *Hashimoto* does not disclose or suggest binding a local name used by the task to available resources, or binding a local name used by a task to multiple available resources, or binding a local name to available resources using a description of a desired resource, or a resource mediator that obtains a message from a task which contains a local name and that

identifies a resource handler task for handling the message by resolving the local name as claimed in claims 1 and 22. *Govett* discloses an architecture for managing client-server communication (*Govett*, col. 3, lines 18-63) rather than binding a local name used by the task to available resources, binding a local name used by a task to multiple available resources, binding a local name to available resources using a description of a desired resource, and a resource mediator that obtains a message from a task which contains a local name and that identifies a resource handler task for handling the message by resolving the local name as claimed in claim 1 and 22.

Applicant submits that claims 9 and 27 are not obvious in view of *Hashimoto* and *Nomura* because claims 9 and 27 depend from claims 1 and 22 and *Hashimoto* and *Nomura* do not teach or suggest the limitations of claims 1 and 22. *Nomura* discloses a workspace management system that places icons representing resources in particular areas of a display (Nomura, col. 10, lines 47-67) rather than binding a local name used by the task to available resources, binding a local name used by a task to multiple available resources, binding a local name to available resources using a description of a desired resource, and a resource mediator that obtains a message from a task which contains a local name and that identifies a resource handler task for handling the message by resolving the local name as claimed in claims 1 and 22.

Applicant submits that claims 10-11, 16-19, 28-29, and 32-34 are not obvious in view of *Hashimoto* and *Ji* because claims 10-11, 16-19, 28-29, and 32-34 depend from claims 1 and 22 and *Hashimoto* and *Ji* do not teach or suggest the limitations of claims 1 and 22. Ji discloses a system with virus detection and removal during file

transfer in a network (Ji, col. 2, lines 39-44) rather than binding a local name used by the task to available resources, binding a local name used by a task to multiple available resources, binding a local name to available resources using a description of a desired resource, and a resource mediator that obtains a message from a task which contains a local name and that identifies a resource handler task for handling the message by resolving the local name as claimed in claims 1 and 22.

It is respectfully submitted that in view of the amendments and arguments set forth above, the applicable objections and rejections have been overcome.

The Commissioner is authorized to charge any underpayment or credit any overpayment to Deposit Account No. 08-2025 for any matter in connection with this response, including any fee for extension of time, which may be required.

Respectfully submitted,

Date: 12-12-03 By: _____

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